

memorandum

DATE: March 13, 1998

REPLY TO:
ATTN OF: Office of Environmental Policy and Assistance: Koss: 202-586-7964

SUBJECT: Information -- New Clean Air Act Stratospheric Ozone Protection Final Rule
Related to Release and Disposal of Halons and Training of Technicians

TO: Distribution

On March 5, 1998, ([63 FR 11084](#)), the Environmental Protection Agency (EPA) issued a final rule under §608(a) of the Clean Air Act (CAA) to reduce emissions of halons. The requirements are codified in a new subpart H to 40 *CFR* 82. The effective date of the rule is April 6, 1998. The rule will be particularly relevant for the Department of Energy's (DOE) halon repository at the Savannah River Site.

Section 608(a) of the CAA directs EPA to issue regulations establishing standards and requirements for the use and disposal of Class I and Class II substances. Class I substances are listed in Appendix A to 40 *CFR* 82 Subpart A, and Class II substances are listed in Appendix B to 40 *CFR* 82 Subpart A. Halons (an abbreviation for halogenated hydrocarbons) are Class I (specifically, Class I Group B) substances, and are among the most ozone-depleting chemicals. Halons are commonly used for fire suppression and for explosion protection.

The new rule sets forth the following six requirements:

1. The manufacture of halon blends is banned, except blends manufactured solely for the purpose of aviation fire protection.
2. The intentional release of halons during training of technicians and during testing, repair, and disposal of equipment containing halons is prohibited. The rule provides the following exemptions from this prohibition:
 - *De minimis* releases associated with good faith attempts to recycle or recover halon
 - Releases of halons during testing of fire extinguishing systems if the following four conditions are met: 1) equipment using suitable alternative fire extinguishing agents is unavailable, 2) testing requiring release of the extinguishing agent is essential to demonstrate equipment functionality, 3) equipment failure would pose great risk to human safety or the environment, and 4) a simulant agent cannot be used in place of the halon during testing
 - Releases of halons associated with 1) research and development of halon alternatives, and 2) analytical determination of halon purity
 - Qualification and development testing during the design and development process of halon-containing systems or equipment when such tests are essential to demonstrate system or equipment functionality and when a suitable simulant agent cannot be used
 - Emergency release of halons for fire extinguishing, explosion inertion, or other emergency applications for which the equipment or systems were designed.
3. Organizations which employ technicians who test, maintain, service, repair, or dispose of equipment containing halons must train the technicians in

halon emissions reduction within 30 days of hiring or by September 1, 1998, whichever is later. EPA provides a list of suggested documents to consult in developing a training program at 63 *FR* 11090 and 11091.

4. Halons can only be disposed of by sending them for recycling to a recycler operating in accordance with National Fire Protection Association standards or by arranging for their destruction by one of the following controlled processes: 1) liquid injection incineration, 2) reactor cracking, 3) gaseous/fume oxidation, 4) rotary kiln incineration, 5) cement kiln, 6) radiofrequency plasma destruction, or 7) an EPA-approved destruction technology that achieves a destruction efficiency of 98% or greater.
5. Halon-containing equipment can only be disposed of by sending it for halon recovery to a manufacturer, fire equipment dealer, or recycler who operates in accordance with National Fire Protection Association standards. This requirement does not apply to 1) ancillary system devices such as electrical detection control components which are not necessary to the safe and secure containment of the halon within the equipment, 2) fully discharged total flooding systems, or 3) equipment containing only *de minimis* quantities of halons.
6. Owners of halon-containing equipment must not allow release of halons to occur as a result of failure to maintain the equipment.

A copy of EPA's *Federal Register* notice (15 pages) can be accessed and downloaded from: (<http://tis-nt.eh.doe.gov/oepa/rules/63fr11084.pdf>). A copy of this memorandum and the notice can also be accessed from the EH-41 Web site: (<http://tis-nt.eh.doe.gov/oepa/>). From this location click on the "Focus Areas" button, then the "Ozone-Depleting Substances" selection, then the "Regulatory Information" selection. This memorandum should be distributed to DOE and DOE contractor staff with fire protection responsibilities. Specific questions on this rule or general questions on the Department's phaseout of ozone-depleting substances should be directed to Ted Koss of my staff at 202-586-7964 or theodore.koss@eh.doe.gov.

(original signed by Andrew Wallo III)

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